GenCore version 4.5

OM protein - protein search, using sw model

Run on: July 18, 2001, 15:54:31 ; Search time 13.86 Seconds
(without alignments)
1110.426 Million cell updates/sec

Title: US-09-587-111-5
Perfect score: 4004
Sequence: 1 MTSPSSSPVFRLETLDGGQE.....EDEDGASEENYVPVQLLQSN 764

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 193259 seqs, 20144635 residues

Total number of hits satisfying chosen parameters: 193259

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1645.5	41.1	839	4	US-09-197-636-2	Sequence 2, Appli
2	1644.5	41.1	839	4	US-09-197-636-8	Sequence 8, Appli
3	1638.5	40.9	839	4	US-09-197-636-4	Sequence 4, Appli
4	151	3.8	1839	2	US-09-172-977-4	Sequence 4, Appli
5	150	3.7	1088	4	US-09-082-059-2	Sequence 2, Appli
6	148	3.7	843	2	US-09-172-977-3	Sequence 3, Appli
7	146	3.6	1095	4	US-09-112-096-15	Sequence 15, Appl
8	138.5	3.5	352	3	US-09-065-474-139	Sequence 139, App
9	138.5	3.5	1745	2	US-09-031-485-33	Sequence 33, Appl
10	138.5	3.5	1745	2	US-08-847-429A-33	Sequence 33, Appl
11	138.5	3.5	1745	3	US-09-065-474-33	Sequence 33, Appl
12	137	3.4	1533	1	US-08-623-679-9	Sequence 9, Appli
13	137	3.4	1533	3	US-08-933-774-9	Sequence 9, Appli
14	131	3.3	303	2	US-09-031-485-23	Sequence 23, Appl
15	131	3.3	303	2	US-08-847-429A-23	Sequence 23, Appl
16	131	3.3	303	3	US-09-065-474-23	Sequence 23, Appl
17	129	3.2	348	2	US-09-031-485-28	Sequence 28, Appl
18	129	3.2	348	2	US-08-847-429A-28	Sequence 28, Appl
19	129	3.2	348	3	US-09-065-474-28	Sequence 28, Appl
20	127	3.2	300	2	US-08-897-340-32	Sequence 32, Appl
21	127	3.2	300	4	US-09-252-329-32	Sequence 32, Appl
22	126	3.1	551	3	US-08-699-103B-25	Sequence 25, Appl
23	125.5	3.1	787	4	US-09-188-930-334	Sequence 334, App
24	125.5	3.1	1139	1	US-08-537-210A-4	Sequence 4, Appli
25	125.5	3.1	1139	4	US-09-113-825-4	Sequence 4, Appli
26	125.5	3.1	2703	1	US-08-185-432-19	Sequence 19, Appl
27	123.5	3.1	191	2	US-09-031-485-20	Sequence 20, Appl
28	123.5	3.1	191	2	US-08-847-429A-20	Sequence 20, Appl
29	123.5	3.1	191	3	US-09-065-474-20	Sequence 20, Appl
30	122	3.0	741	3	US-08-943-956A-2	Sequence 2, Appli
31	120.5	3.0	302	2	US-09-031-485-38	Sequence 38, Appl
32	120.5	3.0	302	2	US-08-847-429A-38	Sequence 38, Appl
33	120.5	3.0	302	3	US-09-065-474-38	Sequence 38, Appl
34	120.5	3.0	741	2	US-08-462-481-2	Sequence 2, Appli
35	120.5	3.0	741	2	US-08-436-771-2	Sequence 2, Appli
36	120.5	3.0	741	2	US-08-436-771-4	Sequence 4, Appli
37	120.5	3.0	741	2	US-08-434-998-2	Sequence 2, Appli
38	120.5	3.0	741	2	US-08-434-998-4	Sequence 4, Appli
39	120.5	3.0	741	2	US-08-487-797-2	Sequence 2, Appli
40	120.5	3.0	741	2	US-08-487-797-4	Sequence 4, Appli
41	120.5	3.0	741	2	US-08-701-005A-2	Sequence 2, Appli
42	120.5	3.0	741	2	US-08-479-895-2	Sequence 2, Appli
43	120.5	3.0	741	5	PCT-US95-02058-2	Sequence 2, Appli
44	120.5	3.0	741	5	PCT-US95-02058-4	Sequence 4, Appli
45	119.5	3.0	357	2	US-08-031-538-4	Sequence 4, Appli

ALIGNMENTS

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RESULT 1
US-09-197-636-2
; Sequence 2, Application US/09197636
; Patent No. 6239267
;  GENERAL INFORMATION:
;    APPLICANT:  DUCKWORTH, DAVID
;    APPLICANT:  HAYES, PHILIP
;    APPLICANT:  MEADOWS, HELEN
;    APPLICANT:  DAVIS, JOHN
;    TITLE OF INVENTION:  NOVEL COMPOUNDS
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Ratner & Prestia
;      STREET:  P.O. Box 980
;      CITY:  Valley Forge
;      STATE:  PA
;      COUNTRY:  US
;      ZIP:  19482-0980
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/197,636
;      FILING DATE:  23-NOV-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  UK 9805137.8
;      FILING DATE:  12-MAR-1998
;      APPLICATION NUMBER:  UK 9815791.0
;      FILING DATE:  21-JUL-1998
;      APPLICATION NUMBER:  UK 9819278.4
;      FILING DATE:  03-SEP-1998
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Prestia, Paul F
;      REGISTRATION NUMBER:  23,031
;      REFERENCE/DOCKET NUMBER:  GP-30075
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  601-407-0700
;      TELEFAX:  610-407-0701
;      TELEX:  846169
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  839 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-197-636-2
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  Query Match           41.1%;  Score 1645.5;  DB 4;  Length 839;
  Best Local Similarity  48.5%;  Pred. No. 9.1e-147;
  Matches  344;  Conservative  121;  Mismatches  200;  Indels   45;  Gaps   11;

Qy      74 FDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLMKAVLNLKDGVNA 133
           :||  :| ||::   :||  |  :| |: |:|||:|: :  ||||||:||:||| || |
Db     113 YDRRSIFEAVAQNNCQDLESLLLFLQKSKKHLTDNEFKDPETGKTCLLKAMLNLHDGQNT 172

Qy     134 CILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARA 193
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Db     173 TIPLLLEIARQTDSLKELVNASYTDSYYKGQTALHIAIERRNMALVTLLVENGADVQAAA 232

Qy     194 CGRFFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHAL 252
           | ||:| :|   |||||||||||||| |  :| :||:|  | | : | || ||||||||
Db     233 HGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLLQNSWQTADISARDSVGNTVLHAL 292

Qy     253 VMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRH 312
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Db     293 VEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGVLAY 352

Qy     313 ILQREFS--GLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAF-HCKSPHRHR 369
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Db     353 ILQREIQEPECRHLSRKFTEWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHD 412

Qy     370 MVVLEPLNKLLQAKWDLLIPK-FFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKAE-V 427
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Db     413 MLLVEPLNRLLQDKWDRFVKRIFYFNFLVYCLYMIIFTMAAYYRPV---DGLPPFKMEKT 469

Qy     428 GNSMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVL 487
           |:   :|| || :|||:|     : || :|   :   |:||| |:|| |:|  : : ||
Db     470 GDYFRVTGEILSVLGGVYFFFRGIQYFLQRRPSMKTLFVDSYSEMLFFLQSLFMLATVVL 529

Qy     488 CFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVMIQKVILRDLLRFLLIYLVFLF 547
           |  :: |:  :| :| ||| |:|||||||  |||:|||:|:||||| ||: :|:||||
Db     530 YFSHLKEYVASMVFSLALGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYIVFLF 589

Qy     548 GFAVALVSLSQEA------------WRPEAPTGPNATESVQPMEGQEDEGNGAQYRGIL 594
           ||: |:|:| ::              ||  |   |:::                 | :
Db     590 GFSTAVVTLIEDGKNDSLPSESTSHRWRGPACRPPDSS----------------YNSLY 632

Qy     595 EASLELFKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLLNMLIALMSETVNSVAT 654
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Db     633 STCLELFKFTIGMGDLEFTENYDFKAVFIILLLAYVILTYILLLNMLIALMGETVNKIAQ 692

Qy     655 DSWSIWKLQKAISVLEMENGYWWC-RKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWAS 713
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Db     693 ESKNIWKLQRAITILDTEKSFLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTT 752

Qy     714 WEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ 762
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RESULT   2
US-09-197-636-8
; Sequence 8, Application US/09197636
; Patent No. 6239267
;  GENERAL INFORMATION:
;    APPLICANT:  DUCKWORTH, DAVID
;    APPLICANT:  HAYES, PHILIP
;    APPLICANT:  MEADOWS, HELEN
;    APPLICANT:  DAVIS, JOHN
;    TITLE OF INVENTION:  NOVEL COMPOUNDS
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Ratner & Prestia
;      STREET:  P.O. Box 980
;      CITY:  Valley Forge
;      STATE:  PA
;      COUNTRY:  US
;      ZIP:  19482-0980
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/197,636
;      FILING DATE:  23-NOV-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  UK 9805137.8
;      FILING DATE:  12-MAR-1998
;      APPLICATION NUMBER:  UK 9815791.0
;      FILING DATE:  21-JUL-1998
;      APPLICATION NUMBER:  UK 9819278.4
;      FILING DATE:  03-SEP-1998
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Prestia, Paul F
;      REGISTRATION NUMBER:  23,031
;      REFERENCE/DOCKET NUMBER:  GP-30075
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  601-407-0700
;      TELEFAX:  610-407-0701
;      TELEX:  846169
;  INFORMATION FOR SEQ ID NO:  8:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  839 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-197-636-8


  Query Match           41.1%;  Score 1644.5;  DB 4;  Length 839;
  Best Local Similarity  48.5%;  Pred. No. 1.1e-146;
  Matches  344;  Conservative  121;  Mismatches  200;  Indels   45;  Gaps   11;

Qy      74 FDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLMKAVLNLKDGVNA 133
           :||  :| ||::   :||  |  :| |: |:|||:|: :  ||||||:||:||| || |
Db     113 YDRRSIFEAVAQNNCQDLESLLLFLQKSKKHLTDNEFKDPETGKTCLLKAMLNLHDGQNT 172

Qy     134 CILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARA 193
           |  ||:| | : : : ||||  || ||:| :|||||||:|::  | |||||||:| | |
Db     173 TIPLLLEIARQTDSLKELVNASYTDSYYKGQTALHIAIERRNMALVTLLVENGADVQAAA 232

Qy     194 CGRFFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHAL 252
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Db     233 HGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLLQNSWQTADISARDSVGNTVLHAL 292

Qy     253 VMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRH 312
           | ::||:|:|   |||||: :|  ||:| ||::||:: | : :||| ||| ||| :  :
Db     293 VEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGVLAY 352

Qy     313 ILQREFS--GLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAF-HCKSPHRHR 369
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Db     353 ILQREIQEPECRHLSRKFTEWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHD 412

Qy     370 MVVLEPLNKLLQAKWDLLIPK-FFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKAE-V 427
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Db     413 MLLVEPLNRLLQDKWDRFVKRIFYFNFLVYCLYMIIFTMAAYYRPV---DGLPPFKMEKT 469

Qy     428 GNSMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVL 487
           |:   :|| || :|||:|     : || :|   :   |:||| |:|| |:|  : : ||
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Qy     488 CFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVMIQKVILRDLLRFLLIYLVFLF 547
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Db     530 YFSHLKEYVASMVFSLALGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYVVFLF 589

Qy     548 GFAVALVSLSQEA------------WRPEAPTGPNATESVQPMEGQEDEGNGAQYRGIL 594
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Db    633 STCLELFKFTIGMGDLEFTENYDFKAVFIILLLAYVILTYILLLNMLIALMGETVNKIAQ 692

Qy    655 DSWSIWKLQKAISVLEMENGYWWC-RKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWAS 713
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Db    693 ESKNIWKLQRAITILDTEKSFLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTT 752

Qy    714 WEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ 762
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Db    753 WNTNVGIINEDPGNCEGVKRTLSFSLRSS----RVSGRHWKNFALVPLLR 798


RESULT   3
US-09-197-636-4
; Sequence 4, Application US/09197636
; Patent No. 6239267
;  GENERAL INFORMATION:
;    APPLICANT:  DUCKWORTH, DAVID
;    APPLICANT:  HAYES, PHILIP
;    APPLICANT:  MEADOWS, HELEN
;    APPLICANT:  DAVIS, JOHN
;    TITLE OF INVENTION:  NOVEL COMPOUNDS
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Ratner & Prestia
;      STREET:  P.O. Box 980
;      CITY:  Valley Forge
;      STATE:  PA
;      COUNTRY:  US
;      ZIP:  19482-0980
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/197,636
;      FILING DATE:  23-NOV-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  UK 9805137.8
;      FILING DATE:  12-MAR-1998
;      APPLICATION NUMBER:  UK 9815791.0
;      FILING DATE:  21-JUL-1998
;      APPLICATION NUMBER:  UK 9819278.4
;      FILING DATE:  03-SEP-1998
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Prestia, Paul F
;      REGISTRATION NUMBER:  23,031
;      REFERENCE/DOCKET NUMBER:  GP-30075
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  601-407-0700
;      TELEFAX:  610-407-0701
;      TELEX:  846169
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  839 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-197-636-4


  Query Match             40.9%;  Score 1638.5;  DB 4;  Length 839;
  Best Local Similarity   48.3%;  Pred. No. 4.2e-146;
  Matches  343;  Conservative  121;  Mismatches  201;  Indels   45;  Gaps   11;

Qy     74 FDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLMKAVLNLKDGVNA 133
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Db    113 YDRRSIFEAVAQNNCQDLESLLLFLQKSKKHXTDNEFKDPETGKTCLLKAMLNLHDGQNT 172

Qy    134 CILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARA 193
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Qy    194 CGRFFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHAL 252
          | ||:| :|   |||||||||||||| |  :| :||:|  | | : | || ||||||||
Db    233 HGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLLQNSWQTADISARDSVGNTVLHAL 292

Qy    253 VMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRH 312
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Db    293 VEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGVLAY 352

Qy    313 ILQREFS--GLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAF-HCKSPHRHR 369
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Db    413 MLLVEPLNRLLQDKWDRFVKRIFYFNFLVYCLYMIIFTMAAYYRPV---DGLPPFKMEKT 469

Qy    428 GNSMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVL 487
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Db    470 GDYFRVTGEILSVLGGVYFFFRGIQYFLQRRPSMKTLFVDSYSEMLFFLQSLFMLATVVL 529

Qy    488 CFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVMIQKVILRDLLRFLLIYLVFLF 547
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Db    530 YFSHLKEYVASMVFSLALGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYIVFLF 589

Qy    548 GFAVALVSLSQEA------------WRPEAPTGPNATESVQPMEGQEDEGNGAQYRGIL 594
          ||: |:|:| ::              ||  |   |:::                |  :
Db    590 GFSTAVVTLIEDGKNDSLPSESTSHRWRGPACRPPDSS----------------YNSLY 632

Qy    595 EASLELFKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLLNMLIALMSETVNSVAT 654
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Db    633 STCLELFKFTIGMGDLEFTENYDFKAVFIILLLAYVILTYILLLNMLIALMGETVNKIAQ 692

Qy    655 DSWSIWKLQKAISVLEMENGYWWC-RKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWAS 713
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Db    693 ESKNIWKLQRAITILDTEKSFLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTT 752

Qy    714 WEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ 762
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Db    753 WNTNVGIINEDPGNCEGVKRTLSFSLRSS----RVSGRHWKNFALVPLLR 798


RESULT   4
US-09-172-977-4
; Sequence 4, Application US/09172977
; Patent No. 5989863
; GENERAL INFORMATION:
;  APPLICANT: Tang, Y. Tom
;  APPLICANT: Guegler, Karl J.
;  APPLICANT: Corley, Neil C.
;  APPLICANT: Yue, Henry
;  TITLE OF INVENTION: HUMAN ANKYRIN FAMILY PROTEIN
;  FILE REFERENCE: PF-0615 US
;  CURRENT APPLICATION NUMBER: US/09/172,977
;  CURRENT FILING DATE: 1998-10-14
;  NUMBER OF SEQ ID NOS: 4
;  SOFTWARE: PERL Program
; SEQ ID NO 4
;   LENGTH: 1839
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE: -
;   OTHER INFORMATION: g29491
US-09-172-977-4


  Query Match             3.8%;  Score 151;  DB 2;  Length 1839;
  Best Local Similarity   27.3%;  Pred. No. 6.9e-05;
  Matches   88;  Conservative   46;  Mismatches   96;  Indels   92;  Gaps   19;
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Qy    139 LQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARACGRFF 198
          | :|:   ||    ||:  :    | : |||| :|  :: ::|||: ||:: |
Db    383 LLLDK-RANP----NARALN----GFTPLHIACKKNRIKVMELLVKYGASIQA------- 426

Qy    199 QKGQGTCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHALVMISDN 258
                |  |: :||     ::|  ||:|    ||   |: :| | ||
Db    427 ------ITESGLTPIHVAAFMGHLNIVLLLLQN---GASPDVTNIRGETALHMAA----- 472

Qy    259 SAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRHILQREF 318
          |  : :|      ||: ||       | | |  :: ||| :|:: || || : :||
Db    473 RAGQVEVVRC----LLRNGA-------LVDARAREEQTPLHIASRLGKTEIVQLLLQH-- 519

Qy    319 SGLSHLSRKFTEWCYGPVRVSL----YDLASVDSCEENSVLEIIAFHCKSPHRHRMVVLE 374
            ::|     |   | |: :|      |:|||       :||  | |  :  :
Db    520 --MAHPDAATTNG-YTPLHISAREGQVDVASV-------LLEAGAAHSLATKKG----FT 565

Qy    375 PLNKLLQAKWDLL-IPKFFL----------NFLCNLIYMFIFTAVAYHQPT-------L 415
          ||:  : ||:  | : |  |           | |  |        || |           |
Db    566 PLH--VAAKYGSLDVAKLLLQRRAAADSAGKNGLTPL-------HVAAHYDNQKVALLLL 616

Qy    416 KKQAAPHLKAEVGNSMLLTGHI 437
          :| |:||  |: | : |   ||
Db    617 EKGASPHATAKNGYTPL---HI 635


RESULT   5
US-09-082-059-2
; Sequence 2, Application US/09082059A
; Patent No. 6225086
; GENERAL INFORMATION:
;  APPLICANT: Morrow, Jon S.
;  APPLICANT: Devarajan, Prasad
;  TITLE OF INVENTION: No. 6225086el Ankyrin Proteins and a Method for Their Identificat
;  FILE REFERENCE: 44574-5002-US
;  CURRENT APPLICATION NUMBER: US/09/082,059A
;  CURRENT FILING DATE: 1998-05-21
;  EARLIER APPLICATION NUMBER: 60/047356
;  EARLIER FILING DATE: 1997-05-21
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
;   LENGTH: 1088
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-082-059-2


  Query Match             3.7%;  Score 150;  DB 4;  Length 1088;
  Best Local Similarity   32.3%;  Pred. No. 3.8e-05;
  Matches   51;  Conservative   24;  Mismatches   51;  Indels   32;  Gaps    6;

Qy    162 RGHSALHIAIEKRSLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQ 221
          || :|||:|      : |: ||::|| | |:|      |   |       || ::|   :
Db     86 RGETALHMAARSGQAEVVRYLVQDGAQVEAKA------KDDQT-------PLHISARLGK 132

Qy    222 WDVVSYLLENPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLC 281
          |:|  ||:   | ||  |  : | | ||   : :    |::|         ||  || |
Db    133 ADIVQQLLQ---QGASPNAATTSGYTPLH---LSAREGHEDVAAF------LLDHGASLS 180

Qy    282 PTVQLEDIRNLQDLTPLKLAAKEGKIEIFRHILQREFS 319
          | :       :  ||| :||| ||:|:   :||:  |
Db    181 ITTK-------KGFTPLHVAAKYGKLEVANLLLQKSAS 211


RESULT   6
US-09-172-977-3
; Sequence 3, Application US/09172977
; Patent No. 5989863
; GENERAL INFORMATION:
;  APPLICANT: Tang, Y. Tom
;  APPLICANT: Guegler, Karl J.
;  APPLICANT: Corley, Neil C.
;  APPLICANT: Yue, Henry
;  TITLE OF INVENTION: HUMAN ANKYRIN FAMILY PROTEIN
;  FILE REFERENCE: PF-0615 US
;  CURRENT APPLICATION NUMBER: US/09/172,977
;  CURRENT FILING DATE: 1998-10-14
;  NUMBER OF SEQ ID NOS: 4
;  SOFTWARE: PERL Program
; SEQ ID NO 3
;   LENGTH: 843
;   TYPE: PRT
;   ORGANISM: Rattus norvegicus
;   FEATURE: -
;   OTHER INFORMATION: g1841966
US-09-172-977-3


  Query Match             3.7%;  Score 148;  DB 2;  Length 843;
  Best Local Similarity   27.3%;  Pred. No. 3.9e-05;
  Matches   88;  Conservative   45;  Mismatches   97;  Indels   92;  Gaps   19;

Qy    139 LQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARACGRFF 198
          | :|:   ||    ||:  :    | : |||| :|  :: ::|||: ||:: |
Db    348 LLLDK-RANP----NARALN----GFTPLHIACKKNRIKVMELLVKYGAYIQA------- 391

Qy    199 QKGQGTCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHALVMISDN 258
                |  |: :||     ::|  ||:|    ||   |: :| | ||
Db    392 ------ITESGLTPIPVAAFMGHLNIVLLLLQN---GASPDVTNIRGETALHMAA----- 437

Qy    259 SAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRHILQREF 318
          |  : :|      ||: ||       | | |  :: ||| :|:: || || : :||
Db    438 RAGEVEVVRC----LLRNGA-------LVDARAREEQTPLHIASRLGKTEIVQLLLQH-- 484

Qy    319 SGLSHLSRKFTEWCYGPVRVSL----YDLASVDSCEENSVLEIIAFHCKSPHRHRMVVLE 374
            ::|     |   | |: :|      |:|||       :||  | |  :  :
Db    485 --MAHPDAATTNG-YTPLHISAREGQVDVASV-------LLEAGAAHSLATKKG----FT 530

Qy    375 PLNKLLQAKWDLL-IPKFFL----------NFLCNLIYMFIFTAVAYHQPT-------L 415
          ||:  : ||:  | : |  |           | |  |        || |           |
Db    531 PLH--VAAKYGSLDVAKLLLQRRAAADSAGKNGLTPL-------HVAAHYDNQKVALLLL 581

Qy    416 KKQAAPHLKAEVGNSMLLTGHI 437
          :| |:||  |: | : |   ||
Db    582 EKGASPHATAKNGYTPL---HI 600


RESULT   7
US-09-112-096-15
; Sequence 15, Application US/09112096
; Patent No. 6194152
; GENERAL INFORMATION:
;  APPLICANT: Reiner Laus
;  APPLICANT: Michael H. Shapero
;  APPLICANT: Larisa Tsavaler
;  TITLE OF INVENTION: Prostate Tumor Polynucleotide and
;  TITLE OF INVENTION: Antigen Compositions
;  FILE REFERENCE: 7636-0015.30
;  CURRENT APPLICATION NUMBER: US/09/112,096
;  CURRENT FILING DATE: 1998-07-09
;  EARLIER APPLICATION NUMBER: 60/056,110
;  EARLIER FILING DATE: 1997-08-20
;  NUMBER OF SEQ ID NOS: 29
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 15
;   LENGTH: 1095
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-112-096-15


  Query Match             3.6%;  Score 146;  DB 4;  Length 1095;
  Best Local Similarity   17.8%;  Pred. No. 9.1e-05;
  Matches  151;  Conservative  126;  Mismatches  215;  Indels  354;  Gaps   40;
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Qy      84 SRGVPEDLAG-LPEYLSKTSKYLTDS------EYTEGSTGKTCLMKAVLNLKDG-----V 131
           |  | | |   ||  :|: |:  |:|      |  | |      :  |: :::
Db     342 SSAVKEKLVRFLPRTVSRLSEEETESWIKWLKEILECSH-----LLTVIKMEEAGDEIVS 396

Qy     132 NACILPLLQI------DRDSGNPQ----------PLVNAQCTDDYYRGHSA-----LHIA 170
           ||    | :       |:|: | |           | | :   :  |  ||     :  |
Db     397 NAISYALYKAFSTSEQDKDNWNGQLKLLLEWNQLDLANDEIFTNDRRWESADLQEVMFTA 456

Qy     171 IEKRSLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVSYLLE 230
           : |   : |:| :||| |:      :|                          ||:: |
Db     457 LIKDRPKFVRLFLENGLNLR-----KFLTH---------------------DVLTELFS 489

Qy     231 NPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYD--GLLQAGARLCPTVQLED 288
           |          :|:::  : |: ||  | ||:| ::      : | |       ::
Db     490 N------------HFSTLVYRNLQIAKNS-YNDALLTFVWKLVANFRRGFR-------KE 529

Qy     289 IRN--------LQDLTPLKLAAKEGKIEIFRHILQREF-----SGLSHLSRKFTEWCYGP 335
           ||        | |::|           | || ||  |          ||:   |   |
Db     530 DRNGRDEMDIELHDVSP-----------ITRHPLQALFIWAILQNKKELSKVIWEQTRGC 578

Qy     336 VRVSL----------------------------YDLASVD------SCEENSVLEIIAFH 361
              :|                           |:  :|:      | :|:   ::: :
Db     579 TLAALGASKLLKTLAKVKNDINAAGESEELANEYETRAVELFTECYSSDEDLAEQLLVYS 638

Qy     362 CKSPHRHRMVVLEPLNKLLQAKWDLLIPKFFLNFLCNLIYMFI------FTAVAYHQPTL 415
           |::                |           | : : :      |||    |  |
Db     639 CEA------------------WG----------GSNCLELAVEATDQHFTAQPGVQNFL 669

Qy     416 KKQAAPHLKAEVGN-SMLLTGHILILLGGIYLLVGQ---------LWYF---------- 454
           ||    :  :  |  ::|   |: |:|  ::   :         |||:
Db     670 SKQWYGEISRDTKNWKIILCLFIIPLVGCGFVSFRKKPVDKHKKLLWYYVAFFTSPFVVF 729

Qy     455 -WRRHVFIWISFIDSYFEILFL-FQA--------LLTVVSQVLCFLAIEWYLPLLVSAL- 503
           |  :|  :|:|:  :  :| : | :         | ::|  : |    :||    |: :
Db     730 SW--NVVFYIAFLLLFAYVLLMDFHSVPHPPELVLYSLVFVLFCDEVRQWY----VNGVN 783

Qy     504 -------VLGWLNLLYYTRGF-------QHTGIYS------------------------ 524
                 |:  | | |:  |           : :||
Db     784 YFTDLWNVMDTLGLFYFIAGIVFRLHSSNKSSLYSGRVIFCLDYIIFTLRLIHIFTVSRN 843

Qy     525 -----VMIQKVILRDLLRFLLIYLVFLFGFAVA---LVSLSQEAWR------------- 562
                :|:|:::: |:  || :: |::  | ||   ::  ::: ||
Db     844 LGPKIIMLQRMLI-DVFFFLFLFAVWMVAFGVARQGILRQNEQRWRWIFRSVIYEPYLAM 902

Qy     563 -PEAPTGPNAT----------ESVQPMEGQEDEGNGAQYRGILEASLELFKFTIGMGEL 610
             : |:  : |             :|:  : || |             | :|
Db     903 FGQVPSDVDGTTYDFAHCTFTGNESKPLCVELDEHN------------LPRFP------ 943

Qy     611 AFQEQLHFRGMVLLLLAYVLLTYILLLNMLIALMSETVNSVATDSWSIWKLQKAISVLE 670
                 : : |:  |:| | |||:|:|:|:   || :|  ::  :|| |:   | |
Db     944 --------EWITIPLVCIYMLSTNILLVNLLVAMFGYTVGTVQENNDQVWKFQRYFLVQE 995

Qy     671 -----------MENGYWW----------CRKKQRAGVMLTVGTKPDGSPDERWCFRVEEV 709
                      :   |::          |::|     :               ||: |:
Db     996 YCSRLNIPFPFIVFAYFYMVVKKCFKCCCKEKNMESSVC-------------CFKNEDN 1041

Qy     710 NWASWE 715
              :||
Db    1042 ETLAWE 1047


RESULT   8
US-09-065-474-139
; Sequence 139, Application US/09065474
; Patent No. 6063599
;  GENERAL INFORMATION:
;    APPLICANT:  Tang, Liang
;    APPLICANT:  Blehm, E. Scot
;    TITLE OF INVENTION:  DIROFILARIA AND BRUGIA ANKYRIN
;    TITLE OF INVENTION:  PROTEINS, NUCLEIC ACID MOLECULES, AND
;    TITLE OF INVENTION:  USES THEREOF
;    NUMBER OF SEQUENCES:  171
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Carol Talkington Verser, Ph.D.
;      ADDRESSEE:  Heska Corporation
;      STREET:  1825 Sharp Point Drive
;      CITY:  Fort Collins
;      STATE:  Colorado
;      COUNTRY:  USA
;      ZIP:  80525
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  Windows 95
;      SOFTWARE:  WordPerfect for Windows, Version 7.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/065,474
;      FILING DATE:  24-APR-1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Verser, Carol Talkington
;      REGISTRATION NUMBER:  37,459
;      REFERENCE/DOCKET NUMBER:  HW-5-C1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  970/493-7272
;      TELEFAX:  970/484-9505
;  INFORMATION FOR SEQ ID NO:  139:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  352 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Protein
US-09-065-474-139


  Query Match             3.5%;  Score 138.5;  DB 3;  Length 352;
  Best Local Similarity   25.1%;  Pred. No. 7.7e-05;
  Matches   59;  Conservative   33;  Mismatches   84;  Indels   59;  Gaps    9;

Qy     167 LHIAIEKRSLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVS 226
           ||:|    : :   ||:|||: || |               |  || :||   | |: |
Db     147 LHVAAHYNNDKVALLLLENGASAHAAAKN------------GYTPLHIAAKKNQMDIAS 193

Qy     227 YLLENPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQL 286
             ||   |  |:  |    | | ||  :   :   |  ||       |:: ||::    :
Db     194 TLL---HYKANANAESKAGFTPLH--LAAQEGHREMAAL-------LIENGAKVGAQAR- 240

Qy     287 EDIRNLQDLTPLKLAAKEGKIEIFRHILQREFS-----------------GLSHLSRKF 328
                   |||: | |:| :: :   :::   :                 |  :: |
Db     241 ------NGLTPMHLCAQEDRVSVAEELVKENAAIDPKTKAGYTPLHVACHFGQINMVRFL 294

Qy     329 TEWCYGPVRVSLYDLASVDSCEE------NSVLEIIAFHCKSPHRHRMVVLEPLN 377
             |  :|  |||:   ||     :      |||:  :  |  ||: |      ||:
Db     295 IE--HG-ARVSVITRASYTPLHQAAQQGHNSVVRYLLEHGASPNVHTSTGQTPLS 346


RESULT   9
US-09-031-485-33
; Sequence 33, Application US/09031485
; Patent No. 5824306
;  GENERAL INFORMATION:
;    APPLICANT:  Tang, Liang
;    APPLICANT:  Blehm, E. Scot
;    TITLE OF INVENTION:  DIROFILARIA AND BRUGIA ANKYRIN
;    TITLE OF INVENTION:  PROTEINS, NUCLEIC ACID MOLECULES, AND
;    TITLE OF INVENTION:  USES THEREOF
;    NUMBER OF SEQUENCES:  85
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Carol Talkington Verser, Ph.D.
;      ADDRESSEE:  Heska Corporation
;      STREET:  1825 Sharp Point Drive
;      CITY:  Fort Collins
;      STATE:  Colorado
;      COUNTRY:  USA
;      ZIP:  80525
;    COMPUTER READABLE FORM:
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;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  Windows 95
;      SOFTWARE:  WordPerfect for Windows, Version 7.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/031,485
;      FILING DATE:
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/847,429
;      FILING DATE:  24-APR-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Verser, Carol Talkington
;      REGISTRATION NUMBER:  37,459
;      REFERENCE/DOCKET NUMBER:  HW-5
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  970/493-7272
;      TELEFAX:  970/484-9505
;  INFORMATION FOR SEQ ID NO:  33:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1745 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-031-485-33


  Query Match             3.5%;  Score 138.5;  DB 2;  Length 1745;
  Best Local Similarity   25.1%;  Pred. No. 0.00097;
  Matches   59;  Conservative   33;  Mismatches   84;  Indels   59;  Gaps    9;

Qy     167 LHIAIEKRSLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVS 226
           ||:|    : :   ||:||||: || |               |  || :||   | |: |
Db     582 LHVAAHYNNDKVALLLLENGASAHAAAKN------------GYTPLHIAAKKNQMDIAS 628

Qy     227 YLLENPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQL 286
             ||   |  |:  |    | | ||  :   :   |  ||       |:: ||::    :
Db     629 TLL---HYKANANAESKAGFTPLH--LAAQEGHREMAAL-------LIENGAKVGAQAR- 675

Qy     287 EDIRNLQDLTPLKLAAKEGKIEIFRHILQREFS-----------------GLSHLSRKF 328
                 |||: | |:| :: :   :::   :                   |  :: |
Db     676 ------NGLTPMHLCAQEDRVSVAEELVKENAAIDPKTKAGYTPLHVACHFGQINMVRFL 729

Qy     329 TEWCYGPVRVSLYDLASVDSCEE------NSVLEIIAFHCKSPHRHRMVVLEPLN 377
             |  :|  |||:   ||      :      |||:  :  |  ||: |      ||:
Db     730 IE--HG-ARVSVITRASYTPLHQAAQQGHNSVVRYLLEHGASPNVHTSTGQTPLS 781


RESULT  10
US-08-847-429A-33
; Sequence 33, Application US/08847429A
; Patent No. 5827692
;  GENERAL INFORMATION:
;    APPLICANT:  Tang, Liang
;    APPLICANT:  Blehm, E. Scot
;    TITLE OF INVENTION:  DIROFILARIA AND BRUGIA ANKYRIN
;    TITLE OF INVENTION:  PROTEINS, NUCLEIC ACID MOLECULES, AND
;    TITLE OF INVENTION:  USES THEREOF
;    NUMBER OF SEQUENCES:  85
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Carol Talkington Verser, Ph.D.
;      ADDRESSEE:  Heska Corporation
;      STREET:  1825 Sharp Point Drive
;      CITY:  Fort Collins
;      STATE:  Colorado
;      COUNTRY:  USA
;      ZIP:  80525
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  Windows 95
;      SOFTWARE:  WordPerfect for Windows, Version 7.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/847,429A
;      FILING DATE:  24-APR-1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Verser, Carol Talkington
;      REGISTRATION NUMBER:  37,459
;      REFERENCE/DOCKET NUMBER:  HW-5
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  970/493-7272
;      TELEFAX:  970/484-9505
;  INFORMATION FOR SEQ ID NO:  33:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1745 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-847-429A-33


  Query Match             3.5%;  Score 138.5;  DB 2;  Length 1745;
  Best Local Similarity   25.1%;  Pred. No. 0.00097;
  Matches   59;  Conservative   33;  Mismatches   84;  Indels   59;  Gaps    9;

Qy     167 LHIAIEKRSLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVS 226
           ||:|    : :   ||:||||: || |               |  || :||   | |: |
Db     582 LHVAAHYNNDKVALLLLENGASAHAAAKN------------GYTPLHIAAKKNQMDIAS 628

Qy     227 YLLENPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQL 286
             ||   |  |:  |    | | ||  :   :   |  ||       |:: ||::    :
Db     629 TLL---HYKANANAESKAGFTPLH--LAAQEGHREMAAL-------LIENGAKVGAQAR- 675

Qy     287 EDIRNLQDLTPLKLAAKEGKIEIFRHILQREFS-----------------GLSHLSRKF 328
                 |||: | |:| :: :   :::   :                   |  :: |
Db     676 ------NGLTPMHLCAQEDRVSVAEELVKENAAIDPKTKAGYTPLHVACHFGQINMVRFL 729

Qy     329 TEWCYGPVRVSLYDLASVDSCEE------NSVLEIIAFHCKSPHRHRMVVLEPLN 377
             |  :|  |||:   ||      :      |||:  :  |  ||: |      ||:
Db     730 IE--HG-ARVSVITRASYTPLHQAAQQGHNSVVRYLLEHGASPNVHTSTGQTPLS 781


RESULT  11
US-09-065-474-33
; Sequence 33, Application US/09065474
; Patent No. 6063599
;  GENERAL INFORMATION:
;    APPLICANT:  Tang, Liang
;    APPLICANT:  Blehm, E. Scot
;    TITLE OF INVENTION:  DIROFILARIA AND BRUGIA ANKYRIN
;    TITLE OF INVENTION:  PROTEINS, NUCLEIC ACID MOLECULES, AND
;    TITLE OF INVENTION:  USES THEREOF
;    NUMBER OF SEQUENCES:  171
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Carol Talkington Verser, Ph.D.
;      ADDRESSEE:  Heska Corporation
;      STREET:  1825 Sharp Point Drive
;      CITY:  Fort Collins
;      STATE:  Colorado
;      COUNTRY:  USA
;      ZIP:  80525
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  Windows 95
;      SOFTWARE:  WordPerfect for Windows, Version 7.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/065,474
;      FILING DATE:  24-APR-1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Verser, Carol Talkington
;      REGISTRATION NUMBER:  37,459
;      REFERENCE/DOCKET NUMBER:  HW-5-C1
;    TELECOMMUNICATION INFORMATION:
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;      TELEPHONE:  970/493-7272
;      TELEFAX:  970/484-9505
;  INFORMATION FOR SEQ ID NO:  33:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1745 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-065-474-33


  Query Match             3.5%;  Score 138.5;  DB 3;  Length 1745;
  Best Local Similarity   25.1%;  Pred. No. 0.00097;
  Matches   59;  Conservative   33;  Mismatches   84;  Indels   59;  Gaps    9;

Qy     167 LHIAIEKRSLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVS 226
           ||:|    : :   ||:||||: || |                |  || :||   | |: |
Db     582 LHVAAHYNNDKVALLLLENGASAHAAAKN------------GYTPLHIAAKKNQMDIAS 628

Qy     227 YLLENPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQL 286
           ||   |  |:  |    | | ||  :   :   |  ||       |:: ||::    :
Db     629 TLL---HYKANANAESKAGFTPLH--LAAQEGHREMAAL-------LIENGAKVGAQAR- 675

Qy     287 EDIRNLQDLTPLKLAAKEGKIEIFRHILQREFS-----------------GLSHLSRKF 328
                  |||: | |:| :: :   :::   :                 |  :: |
Db     676 ------NGLTPMHLCAQEDRVSVAEELVKENAAIDPKTKAGYTPLHVACHFGQINMVRFL 729

Qy     329 TEWCYGPVRVSLYDLASVDSCEE------NSVLEIIAFHCKSPHRHRMVVLEPLN 377
           |  :|  |||:   ||     :      |||:  :  |  ||: |      ||:
Db     730 IE--HG-ARVSVITRASYTPLHQAAQQGHNSVVRYLLEHGASPNVHTSTGQTPLS 781


RESULT  12
US-08-623-679-9
; Sequence 9, Application US/08623679
; Patent No. 5674739
;  GENERAL INFORMATION:
;    APPLICANT:  Shyjan, Andrew W.
;    TITLE OF INVENTION:  COMPOSITIONS AND METHODS FOR THE
;    TITLE OF INVENTION:  DIAGNOSIS, PREVENTION AND TREATMENT OF TUMOR
;    TITLE OF INVENTION:  PROGRESSION
;    NUMBER OF SEQUENCES:  9
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/623,679
;      FILING DATE:  29-MAR-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/412,431
;      FILING DATE:  29-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fasse, J. Peter
;      REGISTRATION NUMBER:  32,983
;      REFERENCE/DOCKET NUMBER:  07334/004001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/542-5070
;      TELEFAX:  617/542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  9:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1533 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-623-679-9


  Query Match             3.4%;  Score 137;  DB 1;  Length 1533;
  Best Local Similarity   19.9%;  Pred. No. 0.0011;
  Matches  101;  Conservative   88;  Mismatches  180;  Indels  138;  Gaps   22;

Qy     208 FGELPLSLAACTKQWD------VVSYLLENPHQPASLQATDSQGNTVLHALVMISDNSAE 261
           ||:| | |   : : |       :::| |:|      |:           : ::    :
Db     606 FGQLALELLDQSYKHDEQIAMKLLTYELKNWSNSTCLK------------LAVAAKHRD 652

Qy     262 NIA------LVTSMYDGLLQ----------AGARLCPTVQLEDIRNLQDLTPLKLAAKEG 305
           ||      |:| |: | |:           |  | ||:   : |   |
Db     653 FIAHTCSQMLLTDMWMGRLRMRKNPGLKVIMGILLPPTILFLEFRTYDD---------- 701

Qy     306 KIEIFRHILQREFSGLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAFHCKSP 365
           | :   :|         : |:        :  | |    |||
Db     702 ----FSYQTSKENEDGKEKEEENTD--------ANADAGSRKGDEENE---------- 737

Qy     366 HRHRMVVLEPLNKLLQAKWDLLIPKFFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKA 425
           |: :  :  |:   :   ::  | ||:   :  | |: :|  |      ::    | |:
Db     738 HKKQRSI--PIGTKICEFYNAPIVKFWFYTISYLGYLLLFNYVI----LVRMDGWPSLQE 791

Qy     426 EVGNSMLLTGHILILLGGIYLLV----GQLWYFWRRHVFIWISFIDSYFEI-------LF 474
           :  | :::    : |  |  ::    |:|     : : :|  :  |: |        |
Db     792 WIVISYIVS----LALEKIREILMSEPGKL----SQKIKVW---LQEYWNITDLVAISTF 840

Qy     475 LFQALLTVVSQ--------VLCFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVM 526
           :  |:| : :|         : |   | ||: :|    : | :|         :: | | :|
Db     841 MIGAILRLQNQPYMGYGRVIYCVDIIFWYIRVLD---IFG-VN--------KYLGPYVMM 888

Qy     527 IQKVILRDLLRFLLIYLVFLFGFAVALVSLSQEAWRPEAPTGPNATESVQPMEGQEDEGN 586
           | |::: |:| |::| || |  | ||  ::     :|      |       |
Db     889 IGKMMI-DMLYFVVIMLVVLMSFGVARQAILHPEEKPSWKLARNIFYMPYWM-------- 939

Qy     587 GAQYRGILEASLELFKFTIG--MGELAFQEQ-------LHFRGMVLLLLAYVLLTYILL 637
              |  :    ::|:   |    ||  : |:       :    :   |:  |:|:  |||
Db     940 --IYGEVFADQIDLYAMEINPPCGENLYDEEGKRLPPCIPGAWLTPALMACYLLVANILL 997

Qy     638 LNMLIALMSETVNSVATDSWSIWKLQK 664
           :|:|||: : |   | : |  :|| |:
Db     998 VNLLIAVFNNTFFEVKSISNQVWKFQR 1024


RESULT  13
US-08-933-774-9
; Sequence 9, Application US/08933774A
; Patent No. 6025137
; GENERAL INFORMATION:
;  APPLICANT: Shyjan, Andrew W.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE DIAGNOSIS, PREVENTION
;  TITLE OF INVENTION: AND TREATMENT OF TUMOR PROGRESSION
;  FILE REFERENCE: 07334/004003
;  CURRENT APPLICATION NUMBER: US/08/933,774A
;  CURRENT FILING DATE: 1997-09-19
;  EARLIER APPLICATION NUMBER: US 08/623,679
;  EARLIER FILING DATE: 1996-03-29
;  EARLIER APPLICATION NUMBER: US 08/412,431
;  EARLIER FILING DATE: 1995-03-29
;  NUMBER OF SEQ ID NOS: 10
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 9
;   LENGTH: 1533
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-08-933-774-9


  Query Match             3.4%;  Score 137;  DB 3;  Length 1533;
  Best Local Similarity   19.9%;  Pred. No. 0.0011;
  Matches  101;  Conservative   88;  Mismatches  180;  Indels  138;  Gaps   22;
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Qy    208 FGELPLSLAACTKQWD------VVSYLLENPHQPASLQATDSQGNTVLHALVMISDNSAE 261
          ||:| | |   : : |      :::| |:|      |:             : ::    :
Db    606 FGQLALELLDQSYKHDEQIAMKLLTYELKNWSNSTCLK-----------LAVAAKHRD 652

Qy    262 NIA------LVTSMYDGLLQ----------AGARLCPTVQLEDIRNLQDLTPLKLAAKEG 305
           ||      |:| |: | |:           |  | ||:   : |   |
Db    653 FIAHTCSQMLLTDMWMGRLRMRKNPGLKVIMGILLPPTILFLEFRTYDD---------- 701

Qy    306 KIEIFRHILQREFSGLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAFHCKSP 365
          | :  :|        : |:       :  |  |    |||
Db    702 ----FSYQTSKENEDGKEKEEENTD--------ANADAGSRKGDEENE----------- 737

Qy    366 HRHRMVVLEPLNKLLQAKWDLLIPKFFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKA 425
          |: :  :  |:   :   ::  | ||:   :  | |: :|  |      ::    | |:
Db    738 HKKQRSI--PIGTKICEFYNAPIVKFWFYTISYLGYLLLFNYVI----LVRMDGWPSLQE 791

Qy    426 EVGNSMLLTGHILILLGGIYLLV----GQLWYFWRRHVFIWISFIDSYFEI-------LF 474
          .  | :::    :|  |  ::    |:|     : : :|   :  |: |         |
Db    792 WIVISYIVS----LALEKIREILMSEPGKL----SQKIKVW---LQEYWNITDLVAISTF 840

Qy    475 LFQALLTVVSQ--------VLCFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVM 526
          :  |:| : :|         : |   | ||: :|    : | :|        :: | | :|
Db    841 MIGAILRLQNQPYMGYGRVIYCVDIIFWYIRVLD---IFG-VN--------KYLGPYVMM 888

Qy    527 IQKVILRDLLRFLLIYLVFLFGFAVALVSLSQEAWRPEAPTGPNATESVQPMEGQEDEGN 586
          | |::: |:| |::| || |  | ||  ::     :|      |       |
Db    889 IGKMMI-DMLYFVVIMLVVLMSFGVARQAILHPEEKPSWKLARNIFYMPYWM-------- 939

Qy    587 GAQYRGILEASLELFKFTIG--MGELAFQEQ-------LHFRGMVLLLLAYVLLTYILL 637
              |  :    ::|:   |    ||  : |:       :    :   |:  |:|:  |||
Db    940 --IYGEVFADQIDLYAMEINPPCGENLYDEEGKRLPPCIPGAWLTPALMACYLLVANILL 997

Qy    638 LNMLIALMSETVNSVATDSWSIWKLQK 664
          :|:|||: : |   | : |  :|| |:
Db    998 VNLLIAVFNNTFFEVKSISNQVWKFQR 1024
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RESULT  14
US-09-031-485-23
; Sequence 23, Application US/09031485
; Patent No. 5824306
;  GENERAL INFORMATION:
;    APPLICANT:  Tang, Liang
;    APPLICANT:  Blehm, E. Scot
;    TITLE OF INVENTION:  DIROFILARIA AND BRUGIA ANKYRIN
;    TITLE OF INVENTION:  PROTEINS, NUCLEIC ACID MOLECULES, AND
;    TITLE OF INVENTION:  USES THEREOF
;    NUMBER OF SEQUENCES:  85
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Carol Talkington Verser, Ph.D.
;      ADDRESSEE:  Heska Corporation
;      STREET:  1825 Sharp Point Drive
;      CITY:  Fort Collins
;      STATE:  Colorado
;      COUNTRY:  USA
;      ZIP:  80525
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  Windows 95
;      SOFTWARE:  WordPerfect for Windows, Version 7.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/031,485
;      FILING DATE:
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/847,429
;      FILING DATE:  24-APR-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Verser, Carol Talkington
;      REGISTRATION NUMBER:  37,459
;      REFERENCE/DOCKET NUMBER:  HW-5
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  970/493-7272
;      TELEFAX:  970/484-9505
;  INFORMATION FOR SEQ ID NO:  23:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  303 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-031-485-23


  Query Match             3.3%;  Score 131;  DB 2;  Length 303;
  Best Local Similarity   28.0%;  Pred. No. 0.00031;
  Matches   73;  Conservative   34;  Mismatches   78;  Indels   76;  Gaps   17;

Qy    139 LQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLV----------ENGAN 188
          | :||   |  |  ||:  :    | : |||| :|  :: |:||:          |:| :
Db     26 LLLDR---NADP--NARALN----GFTPLHIACKKNRIKIVELLLKYHAAIEATTESGLS 76

Qy    189 -VHARACGRFFQKGQGTCFYF------------GELPLSLAACTKQWDVVSYLLENPHQ 234
           :|  |    |          |              || || |||   | |:|  |: |
Db     77 PLHVAA----FMGAINIVIYLLQQGANADVATVRGETPLHLAARANQTDIVRVLVRN--- 129

Qy    235 PASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQD 294
          | : |   :  | ||     : :          | :   |||| |   |     |:
Db    130 GAQVDAAARELQTPLHIASRLGN---------TDIVILLLQANA--SPNAATRDL----- 173

Qy    295 LTPLKLAAKEGKIEIFRHIL----------QREFSGLSHLSRKFTEWCYG--PVRVSLYD 342
          ||| :|||||: |:   ::          :: |: | ||: |     ||  ||  || :
Db    174 YTPLHIAAKEGQEEVAAILMDHGTDKTLLTKKGFTPL-HLAAK-----YGNLPVAKSLLE 227

Qy    343 LAS-VDSCEENSVLEI-IAFH 361
            : ||   :| |  : :| |
Db    228 RGTPVDIEGKNQVTPLHVAAH 248


RESULT  15
US-08-847-429A-23
; Sequence 23, Application US/08847429A
; Patent No. 5827692
;  GENERAL INFORMATION:
;    APPLICANT:  Tang, Liang
;    APPLICANT:  Blehm, E. Scot
;    TITLE OF INVENTION:  DIROFILARIA AND BRUGIA ANKYRIN
;    TITLE OF INVENTION:  PROTEINS, NUCLEIC ACID MOLECULES, AND
;    TITLE OF INVENTION:  USES THEREOF
;    NUMBER OF SEQUENCES:  85
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Carol Talkington Verser, Ph.D.
;      ADDRESSEE:  Heska Corporation
;      STREET:  1825 Sharp Point Drive
;      CITY:  Fort Collins
;      STATE:  Colorado
;      COUNTRY:  USA
;      ZIP:  80525
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  Windows 95
;      SOFTWARE:  WordPerfect for Windows, Version 7.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/847,429A
;      FILING DATE:  24-APR-1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Verser, Carol Talkington
;      REGISTRATION NUMBER:  37,459
;      REFERENCE/DOCKET NUMBER:  HW-5
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  970/493-7272
;      TELEFAX:  970/484-9505
;  INFORMATION FOR SEQ ID NO:  23:
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;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  303 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-847-429A-23


  Query Match             3.3%;  Score 131;  DB 2;  Length 303;
  Best Local Similarity   28.0%;  Pred. No. 0.00031;
  Matches   73;  Conservative   34;  Mismatches   78;  Indels   76;  Gaps   17;

Qy     139 LQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLV----------ENGAN 188
           | :||   |  |  ||:  :    | : ||||:|  :: |:||:          |:| :
Db      26 LLLDR---NADP--NARALN----GFTPLHIACKKNRIKIVELLLKYHAAIEATTESGLS 76

Qy     189 -VHARACGRFFQKGQGTCFYF-------------GELPLSLAACTKQWDVVSYLLENPHQ 234
            :|  |    |        |               || || |||   | |:|  |: |
Db      77 PLHVAA----FMGAINIVIYLLQQGANADVATVRGETPLHLAARANQTDIVRVLVRN--- 129

Qy     235 PASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQD 294
           | : |   :  | ||    : :          | :   |||| |   |     |:
Db     130 GAQVDAAARELQTPLHIASRLGN---------TDIVILLLQANA--SPNAATRDL----- 173

Qy     295 LTPLKLAAKEGKIEIFRHIL----------QREFSGLSHLSRKFTEWCYG--PVRVSLYD 342
           ||| :|||||: |:   ::          :: |: | ||: |     ||  ||  || :
Db     174 YTPLHIAAKEGQEEVAAILMDHGTDKTLLTKKGFTPL-HLAAK-----YGNLPVAKSLLE 227

Qy     343 LAS-VDSCEENSVLEI-IAFH 361
             : ||   :| |  : :| |
Db     228 RGTPVDIEGKNQVTPLHVAAH 248


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